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DATE MAILED: 09/05/2006

| APPLICATION NO. | FI | LING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------------|------|------------|----------------------|---------------------|------------------|--|
| 10/822,886 04/13/2004 | | 04/13/2004 | David Michael Glenn | 4829A(CIP) | 4829A(CIP) 4008 | |
| 48227 | 7590 | 09/05/2006 | | EXAMINER | | |
| BASF CAT | | | ARNOLD, ERNST V | | | |
| ISELIN, NJ 08830 | | | | ART UNIT | PAPER NUMBER | |
| | | | | 1616 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | | |
|--|---|------------------------------|--|--|--|--|--|
| | 10/822,886 | GLENN ET AL. | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | Ernst V. Arnold | 1616 | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | |
| Status | | | | | | | |
| 1)区 Responsive to communication(s) filed on <u>ちん</u> | Responsive to communication(s) filed on 5/1/16 | | | | | | |
| , | | | | | | | |
| • *** | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | | | | | | | |
| 4)⊠ Claim(s) <u>1 and 3-11</u> is/are pending in the application. | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ Claim(s) <u>1 and 3-11</u> is/are rejected. | | | | | | | |
| • | 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| Application Papers | | | | | | | |
| 9)☐ The specification is objected to by the Examine | г. | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| The bath of declaration is objected to by the Examiner. Note the attached office follows in form 1.10. | | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| occ the attached actained office detail for a fact | | | | | | | |
| Attachment(s) | n □ 1-1i 2 | (DTO 442) | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) Interview Summary Paper No(s)/Mail D | | | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 6) | Patent Application (PTO-152) | | | | | |

Application/Control Number: 10/822,886

Art Unit: 1616

DETAILED ACTION

The Examiner acknowledges receipt of remarks filed on 5/10/2006. The Examiner has carefully considered Applicant's arguments. Applicant's amendment has necessitated a new ground of rejection. For example, the new limitation of particulate material particle size in new claims 44-51 was not previously presented. Claim 2 has been cancelled and claims 44-65 are new. Accordingly, claims 1, 3-12, 14-23 and 44-65 are pending. Claims 12, 14-23 and 57-65 have been withdrawn and the remaining claims examined. This action is final.

Withdrawn rejections/objections:

- 1. Claims 1, 4 and 11 were rejected under 35 U.S.C. 102(b) as being anticipated by Woods (US 2,957,803). Applicant has amended claim 1 and the reference of Woods no longer reads upon the amended claim. The rejection is withdrawn.
- 2. Claims 1, 2, 4, 6 and 10 were rejected under 35 U.S.C. 102(b) as being anticipated by Jackson et al. (US 2,821,500). Applicant's arguments have been found to be persuasive and the rejection over Jackson et al. is withdrawn.
- 3. Claims 1, 5, 10 and 11 were rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al. (US 5,783,520). Applicant's arguments have been found to be persuasive and the rejection over Jackson et al. is withdrawn.

Page 2

Application/Control Number: 10/822,886 Page 3

Art Unit: 1616

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-11 and 44-56 remain/are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson et al. (US 2,821,500) in view of Puterka et al. (US 6,027,740).

Applicant claims an agricultural, horticultural, or ornamental crop composition comprising: (a) particulate material selected from the group consisting of talc, kaolin, beneficiated kaolin, bentonites, etc...

- (b) organic non-vegetable non-fuel high boiling oil; and
- (c) at least one additive selected from the group consisting of ionic salt, colored particle, or surfactant.

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Application/Control Number: 10/822,886

Art Unit: 1616

Determination of the scope and content of the prior art (MPEP 2141.01)

Page 4

Jackson et al. teach a free flowing granular insecticide coated with oil and an oildispersible organic toxicant for the insect (Column 1, lines 15-16 and column 2, lines 25-31). Jackson et al. teach an example of a composition comprising malathion (an agrichemical pesticide reading on new claims 52 and 53), scarlet dye, gelatin, mineral oil, sucrose and oyster shell (Column 12, lines 20-26). Gelatin can act as a surfactant/dispersant. Oyster shell is a form of calcium carbonate and thus renders obvious other forms of calcium carbonate. Mineral oil is a petroleum based oil and thus reads on instant claim 4. A dye of any color can be added thus anticipating pigments that selectively reflect or absorb in red, blue, or green regions (Column 2, lines 65-67 and column 6, lines 64-73). Sand, quartz and granite are other granular substances that can be used as a carrier thus rendering obvious other forms of sand and quartz (Column 3, lines 28-31). Jackson et al. teach that oyster shell or other calcareous shell can be admixed with sand, quartz or granite as well as fuller's earth or bentonite or silica gel or tobacco stems (Column 4, lines 12-14 and 29-33). Any non-drying or semidrying vegetable, animal or marine oil or mineral oil may be used but mineral or glyceride oil is preferred (Column 5, lines 3-8). Jackson et al. teach the organic watersoluble salt sodium lauryl sulfate (instant claim 5) as a dispersant is used to scatter the toxicant-oil solution into and throughout the moisture that comes in contact with the granules (Column 6, lines 43-55). Jackson et al. teach the granular insecticidal composition in a particle size range of 3 to 100 screen mesh which is on the lower limit

Art Unit: 1616

about 149 microns (Claims 1-20). Jackson et al. teach that up to a few percent of the particles are smaller in size than screen mesh 100 (Column 3, lines 50-54).

Puterka et al. teach the use of calcined kaolins, hydrous kaolins and calcium carbonates as particulate materials for the protection of surfaces, including agricultural and ornamental crop surfaces, from arthropod infestation (Abstract; column 2, lines 19-26; column 3, lines 14-45). Puterka et al. teach the use of surfactants and/or spreader/stickers that can be mixed with the particles and include modified phthalic glycerlol alkyl resins, plant oil based materials with emulsifiers, polymeric terpenes, and nonionic detergents (Column 5, lines 35-46). Puterka et al. teach that the particulate material has a particle size distribution under about 10 microns, preferably below about 5 microns and more preferably about 1 micron or less (Column 4, lines 43-47). Puterka et al. teach that the particulate materials may be applied as a dust (which the Examiner interprets to read on powder) or as a slurry of finely divided particles in a volatile liquid that can be sprayed or otherwise applied to the surface (Column 5, lines 20-35).

Ascertainment of the difference between the prior art and the claims (MPEP 2141.02)

Jackson et al. do not expressly disclose:

- 1) the use of calcined materials in the composition;
- 2) the use of hydrous kaolin in the composition;
- 3) the colorants listed in instant claim 7;

Application/Control Number: 10/822,886 Page 6

Art Unit: 1616

4) the use of modified phthalic glycerlol alkyl resins, plant oil based materials with emulsifiers, polymeric terpenes, and nonionic detergents in the composition;

- 5) the particulate material having a particle size of about 100 microns or less or the narrower limitations of 10 microns or less; 3 microns or less; and 1 micron or less;
 - 6) the composition in the form of a powder, slurry or emulsion; and
 - 7) the composition further comprising plant producing media.

Finding of prima facie obviousness Rational and Motivation (MPEP 2142-2143)

1 and 2. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use calcined kaolin or hydrous kaolin, as suggested by Puterka et al. in the composition of Jackson et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Puterka et al. teach that these materials are non-toxic, which is an important consideration when working with products for human consumption (Column 4, lines 48-49).

- 3. It is the Examiner's position that it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to select colorant/pigment/dye for the composition as suggested by Jackson et al. (A dye of any color can be added (Column 2, lines 65-67 and column 6, lines 64-73). The selection of the specific colorant is well within the purview of one of ordinary skill in the art.
- 4. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use modified phthalic glycerlol alkyl resins, plant oil

based materials with emulsifiers, polymeric terpenes, and nonionic detergents in the composition, as suggested by Puterka et al. in the composition of Jackson et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Puterka et al. teach that these materials aid in spraying uniform treatments on the surfaced to be treated (Column 5, lines 39-40).

5 and 6. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to make the particulate size of the composition of Jackson et al. in the range and form suggested by Puterka et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Jackson et al. teach the best way to apply the insecticidal composition is by hand but this has the deleterious effect of potentially exposing human skin to toxic pesticides (Column 13, line 73 bridging column 14, line 6). Puterka et al. teach spray applications which require the finely divided powder/slurry as discussed above. One of ordinary skill in the art seeking to improve the safety of using the composition of Jackson et al. would have sought alternative means of application, such as spraying, and used a smaller particle size, as suggested by Puterka et al., in the spraying formulation.

7. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to have plant-producing media in the composition of Jackson et al. and produce the instant invention.

Application/Control Number: 10/822,886

Art Unit: 1616

One of ordinary skill in the art would have been motivated to do this because

simply by virtue of spreading the particulate material over a crop growing in plant-

producing media some of the particulate material would be mixed with the plant-

producing media and one of ordinary skill in the art would have the instantly claimed

composition.

In the absence of any criticality/unexpected results, the presently claimed

invention is considered prima facie obvious over the prior art for the reasons of record

and those stated above.

A reference is good not only for what it teaches by direct anticipation but also for

what one of ordinary skill in the art might reasonably infer from the teachings. (In re

Opprecht 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); In re Bode 193 USPQ 12 (CCPA)

1976).

In light of the forgoing discussion, the Examiner concludes that the subject matter

defined by the instant claims would have been obvious within the meaning of 35 USC

103(a).

From the teachings of the references, it is apparent that one of ordinary skill in

the art would have had a reasonable expectation of success in producing the claimed

invention. Therefore, the invention as a whole was prima facie obvious to one of

ordinary skill in the art at the time the invention was made, as evidenced by the

references, especially in the absence of evidence to the contrary.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernst V. Arnold whose telephone number is 571-272-8509. The examiner can normally be reached on M-F (6:15 am-3:45 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/822,886 Page 10

Art Unit: 1616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ernst Arnold
Patent Examiner
Technology Center 1600
Art Unit 1616

John Pala Primary Examiner

Johann Richter, Ph.D. Esq. ALT Unit 1616

Supervisory Potent Francisco

Supervisory Patent Examiner Technology Center 1600